

# Appendix H Quick Troubleshooting Flows

This appendix presents some quick troubleshooting flowcharts for some common issues.

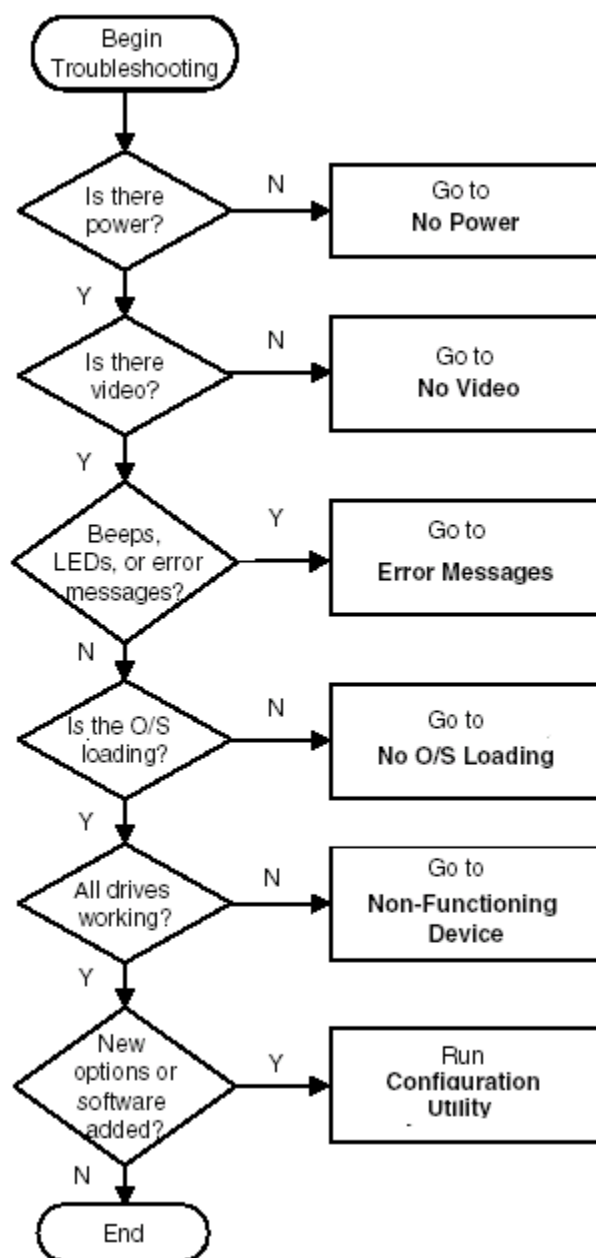


**NOTE** The flowcharts presented here are for general troubleshooting purposes only and they might not apply to your specific workstation.

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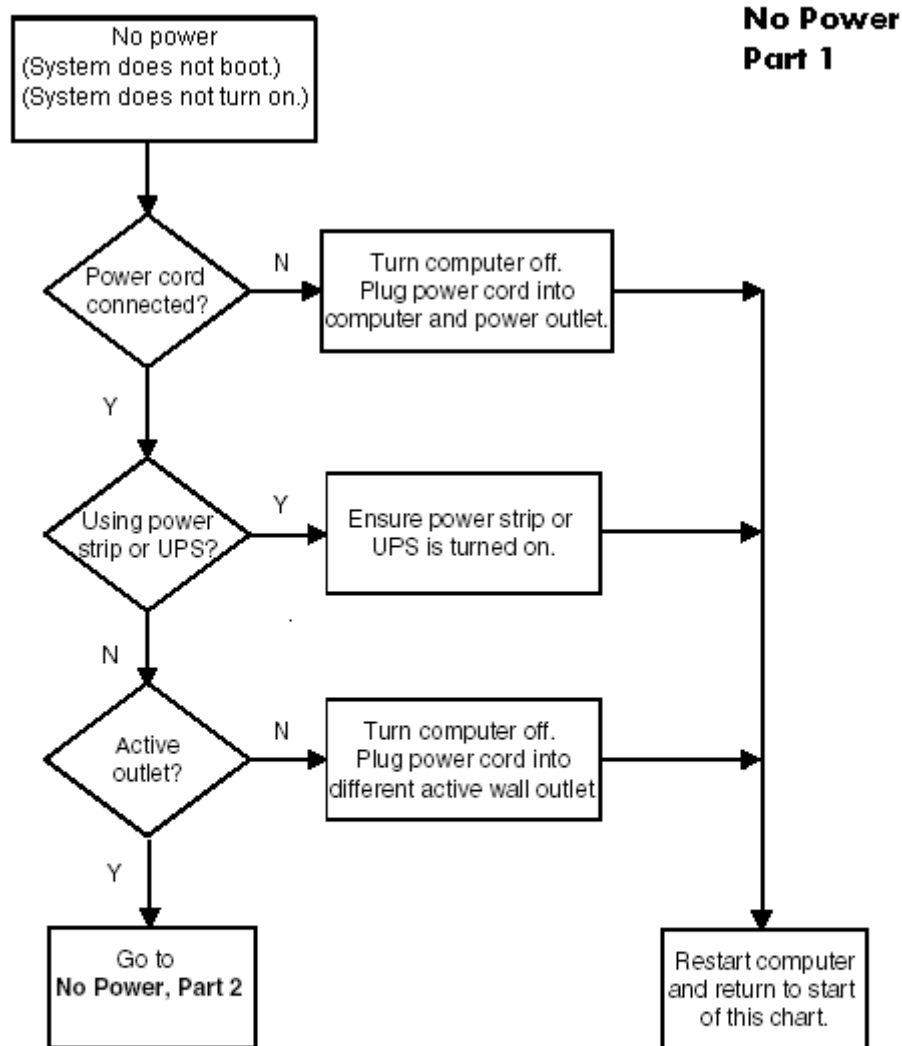
- “Initial Troubleshooting”
- “No Power”
- “No Video”
- “Error Messages”
- “No OS Loading”
- “No OS Loading from Hard Drive”
- “No OS Loading from Diskette Drive”
- “No OS Loading from CD-ROM Drive”
- “No OS Loading from Network”
- “Non-functioning Device”

# Initial Troubleshooting



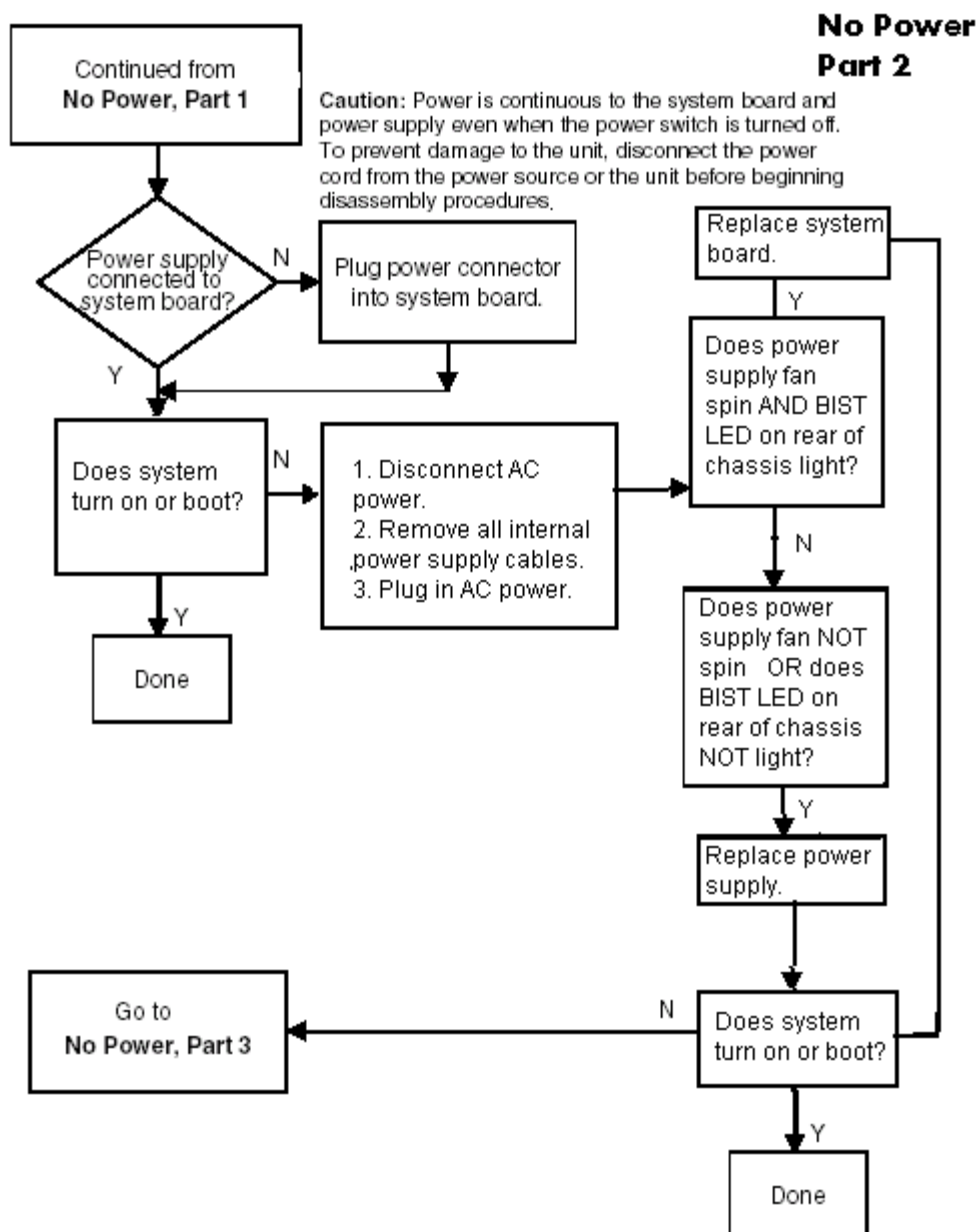
# No Power

## No Power, Part 1



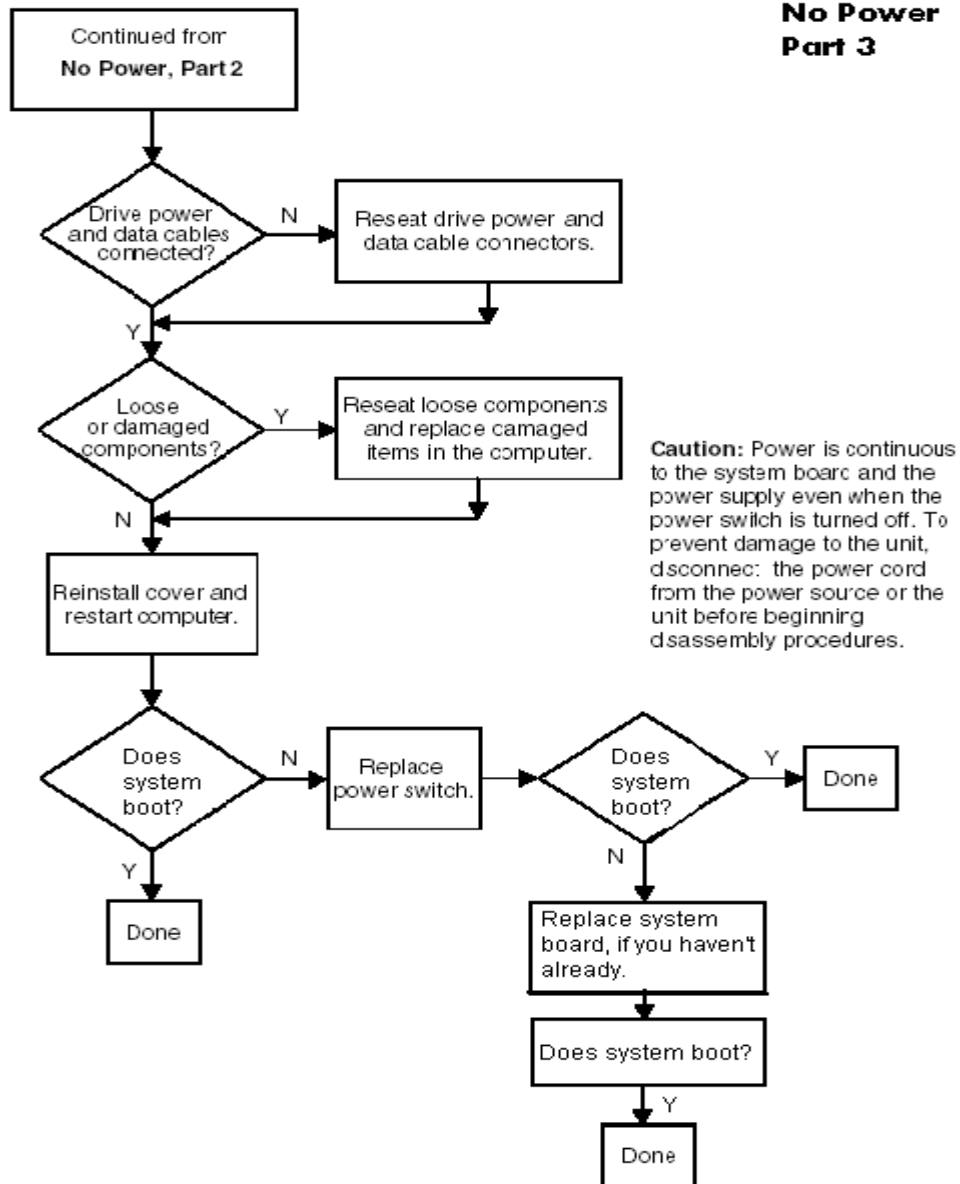
**Caution:** Power is continuous to the system board and power supply even when the power switch is turned off. To prevent damage to the unit, disconnect the power cord from the power source or the unit before beginning disassembly procedures.

## No Power, Part 2



## No Power, Part 3

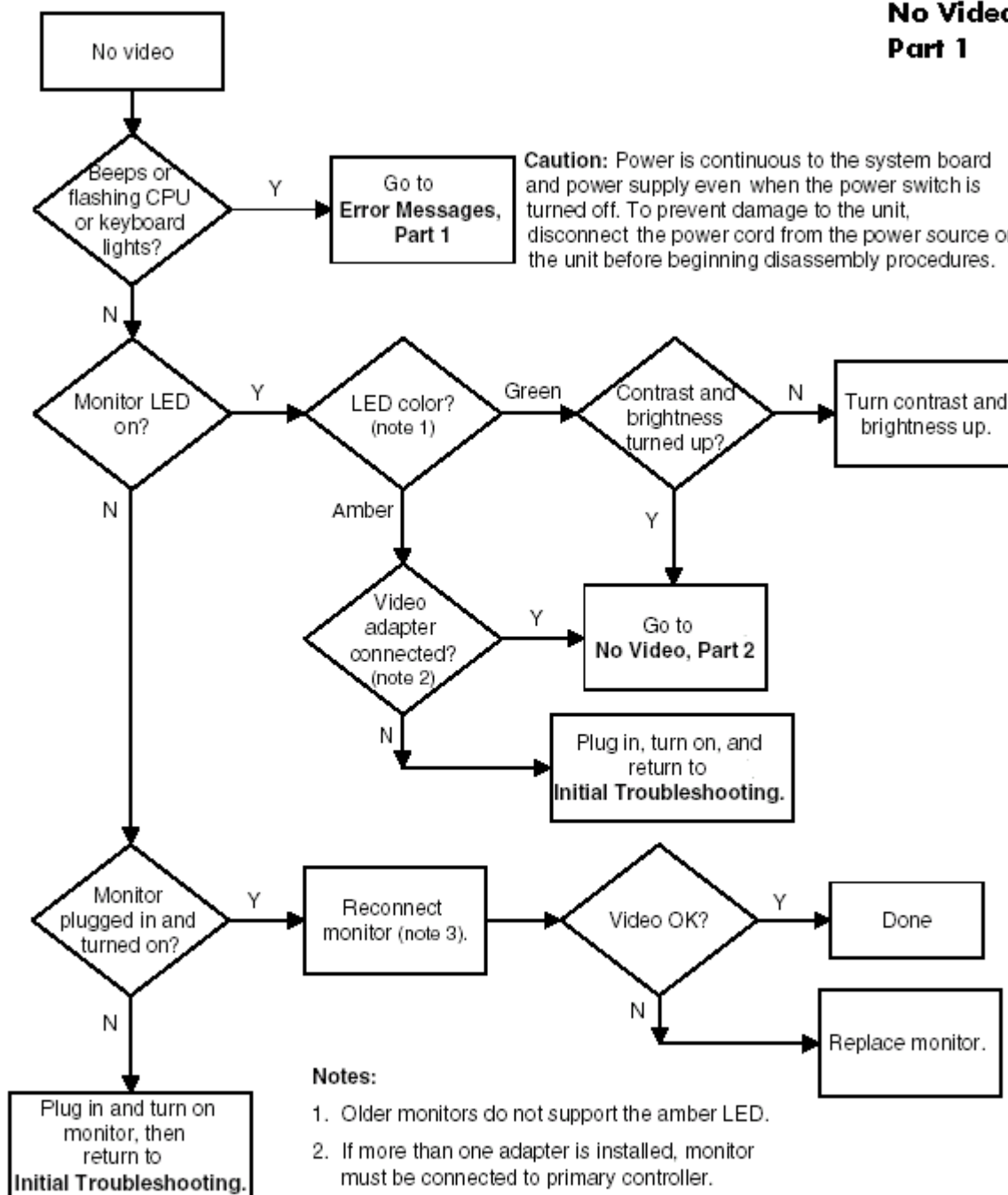
### No Power Part 3



# No Video

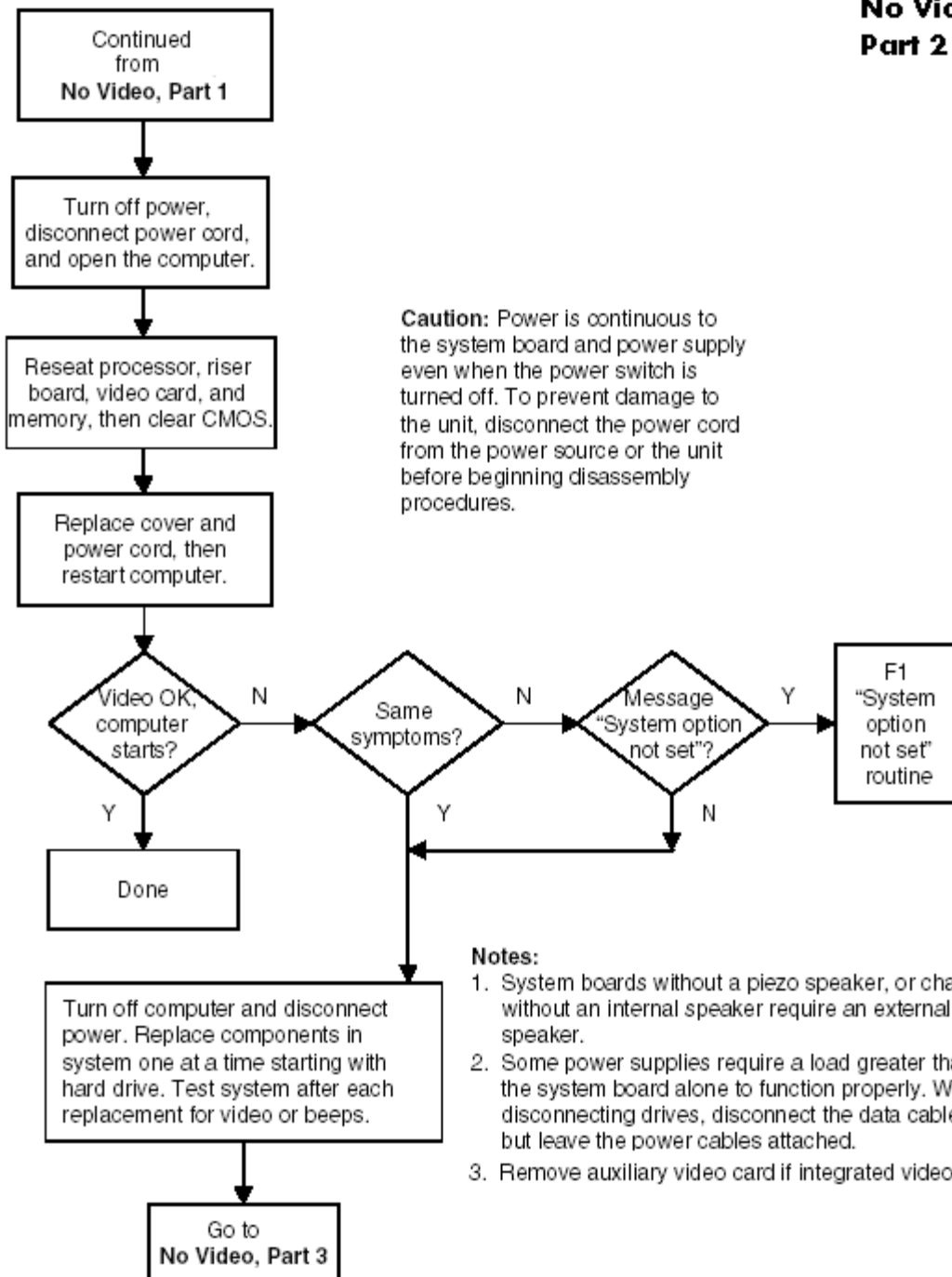
## No Video, Part 1

### No Video Part 1



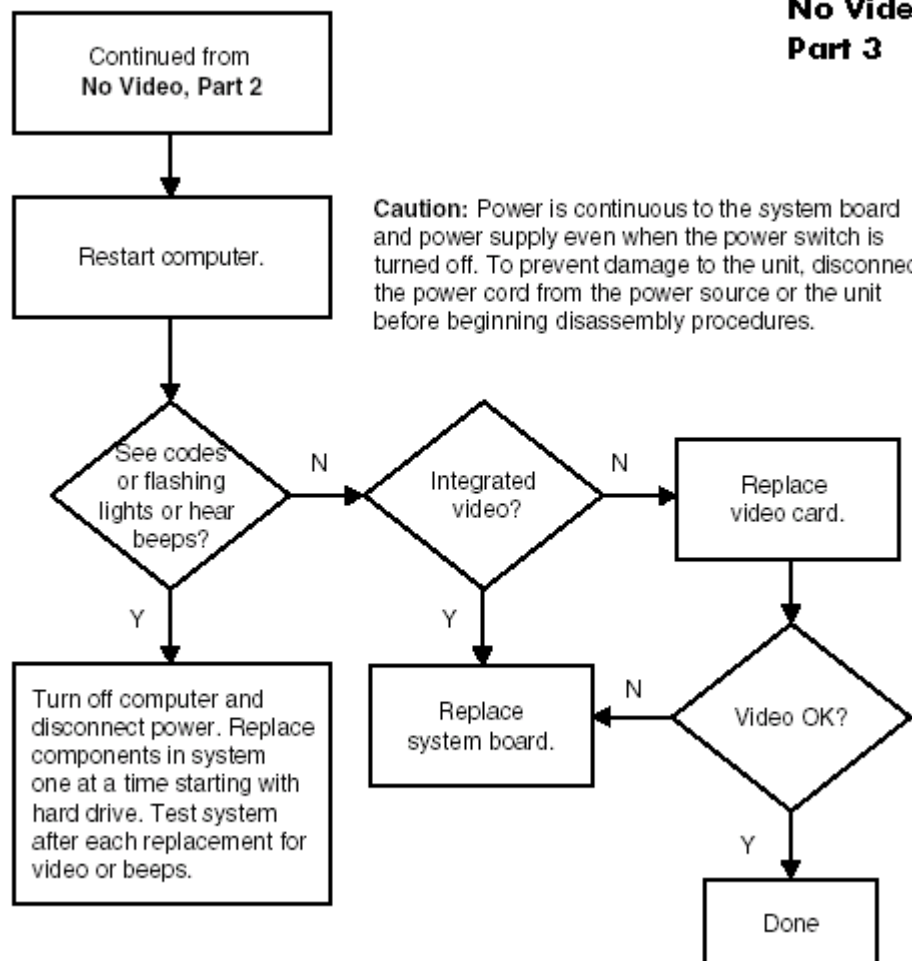
## No Video, Part 2

### No Video Part 2



## No Video, Part 3

### No Video Part 3





# Error Messages

## Error Messages, Part 1

Beeps,  
CPU or Keyboard Lights,  
or POST error messages.

### Error Messages Part 1

**Caution:** Power is continuous to the system board and power supply even when the power switch is turned off. To prevent damage to the unit, disconnect the power cord from the power source or the unit before beginning disassembly procedures.

Power LED has no color showing. Computer is off.

Power LED glows green. Computer is on.

Power LED blinks green 1x/second. Normal suspend mode.

Power LED glows red. CPU not installed/fetching code.

Power LED blinks red 4x/second. CPU thermal shutdown.

Power LED blinks red 1x/two or more seconds. Power supply crow bar.

Power and hard drive LEDs glow red. Riser board not seated.

Num Lock LED flashing green. Memory error.

Caps Lock LED flashing green. No video.

Scroll Lock LED flashing green. System board failure, prior to video.

**Audible. 1L 3S.** System ROM is bad; system is running in FailSafe Boot Block Mode.

**Audible. 2S.** Power-ON successful.

Continued on **Error Messages, Part 2.**

**Notes:** Short (S) and long (L) beeps will only be heard if the system has a speaker.  
LEDs will only function on PS/2 keyboards, not USB.

### Error Messages Part 2

Continued from  
**Error Messages, Part 1**

**Caution:** Power is continuous to the system board and power supply even when the power switch is turned off. To prevent damage to the unit, disconnect the power cord from the power source or the unit before beginning disassembly procedures.

**1S 2L. Num Lock blinking. System memory not present or incompatible.** Unplug, open computer, and check memory modules. Ensure memory modules are correct type and that they match in size and speed.

**1L 2S. Cap Lock blinking. Video controller not present or incorrectly initialized.** Ensure monitor is plugged in. Unplug, open computer, and check video card. Reseat card and ensure it is in the proper expansion slot.

**1L 3S. All keyboard LEDs blinking. ROM Failure.** Create ROM diskette and reload ROM. Download ROMPaq from HP website at [www.hp.com](http://www.hp.com).

**2L 1S. Scroll Lock blinking. System HW failure prior to video.** Unplug, open computer, and check for physical damage. Ensure all cables and cards are seated. Look for burn marks or smoke.

**No beeps. HD and Power LED blinking. Riser not detected.** Unplug, open computer, and check and reseat riser board.

Continued on **Error Messages, Part 3.**

**Notes:** Short (S) and long (L) beeps will only be heard if the system has a speaker.  
LEDs will only function on PS/2 keyboards, not USB.

Continued from  
Error Messages, Part 2

**Caution:** Power is continuous to the system board and power supply even when the power switch is turned off. To prevent damage to the unit, disconnect the power cord from the power source or the unit before beginning disassembly procedures.

**Error 162, 2S Beeps. System Option not set. Select F1.** If error occurs after reboot, unplug and open computer and check CMOS jumper setting.

**Error 163. Time & Date Not Set.** Set time and date in F10 or boot to O/S and set time and date. If error occurs after reboot, unplug and open computer, then check CMOS setting.

**Error 2xx. Memory Error.** Unplug, open computer, and reseat memory modules. Ensure modules are correct type and that they match in size and speed.

**Error 30x. Keyboard Error.** Do not type on keyboard before POST. Ensure keyboard connected to proper connector.

**Error 6xx. Floppy Error.** Unplug, open computer, check diskette drive, and check and reseat power and data cables.

**Error 91x. Misc. Connection Error.** Unplug, open computer, and check hood lock coil, thermal sensor pigtail, and riser for good connection.

**Error 178x. Fixed Disk Error.** Unplug, open computer, check hard drive, and check and reseat power and data cables.

**Error 1800. Thermal Alert.** System overheating. Let computer cool off. Ensure processor has heatsink installed and that speed setting on system board is correct. Remove obstructions to air vents.

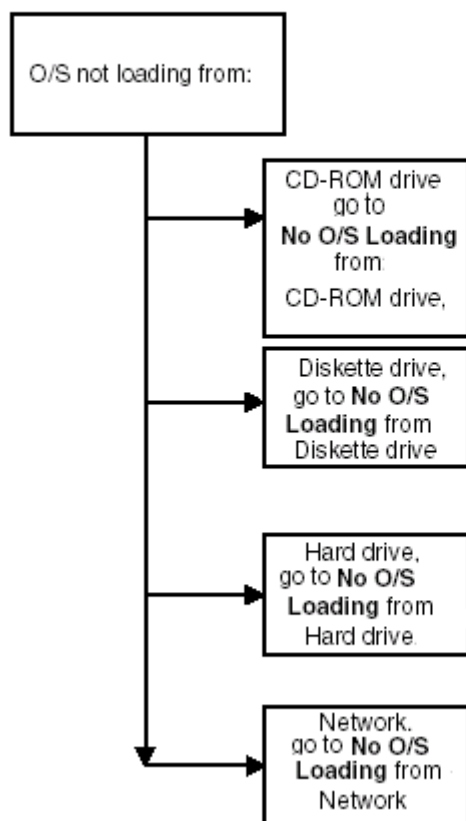
**All other POST error messages** - refer to Chapter 5 for definitions and solutions.

**Notes:** Short (S) and long (L) beeps will only be heard if the system has a speaker.  
LEDs will only function on PS/2 keyboards, not USB.

x = Numbers 1 - 9

# No OS Loading

## No OS Loading



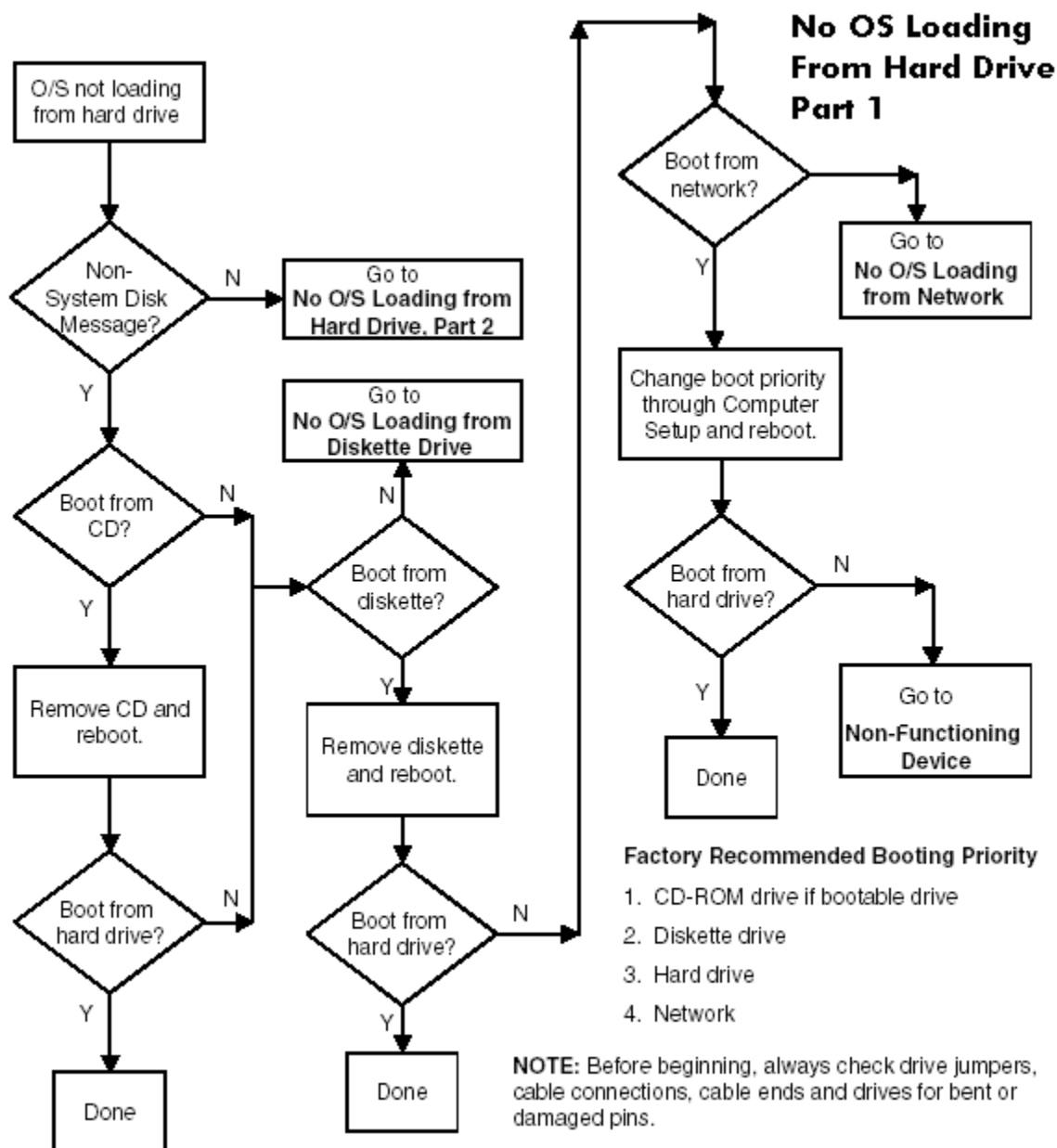
### Factory recommended booting priority

1. CD-ROM drive
2. Diskette drive
3. Hard drive
4. Network

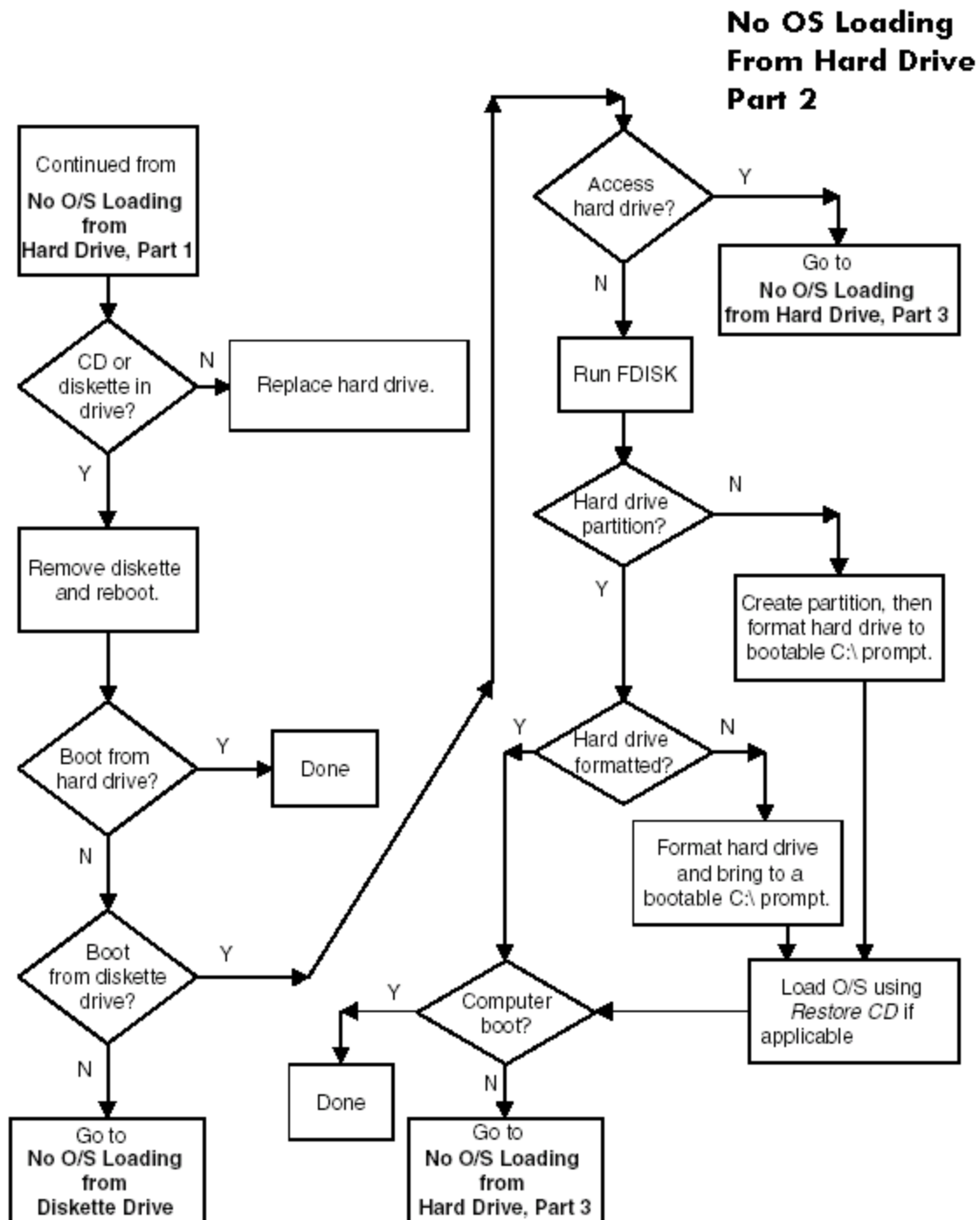
**NOTE:** Before beginning, always check drive jumpers, cable connections, cable ends, and drives for bent or damaged pins.

# No OS Loading from Hard Drive

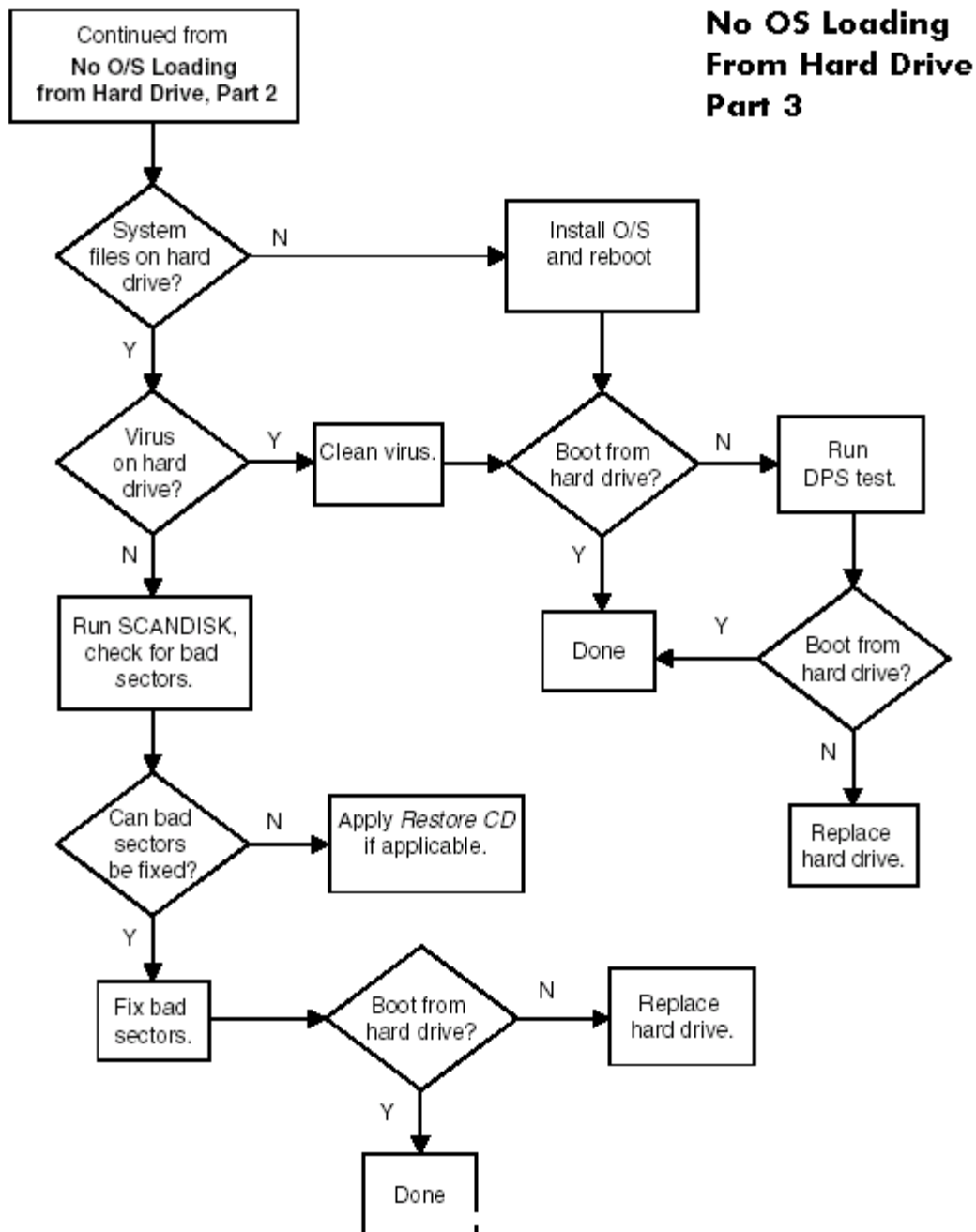
## No OS Loading from Hard Drive, Part 1



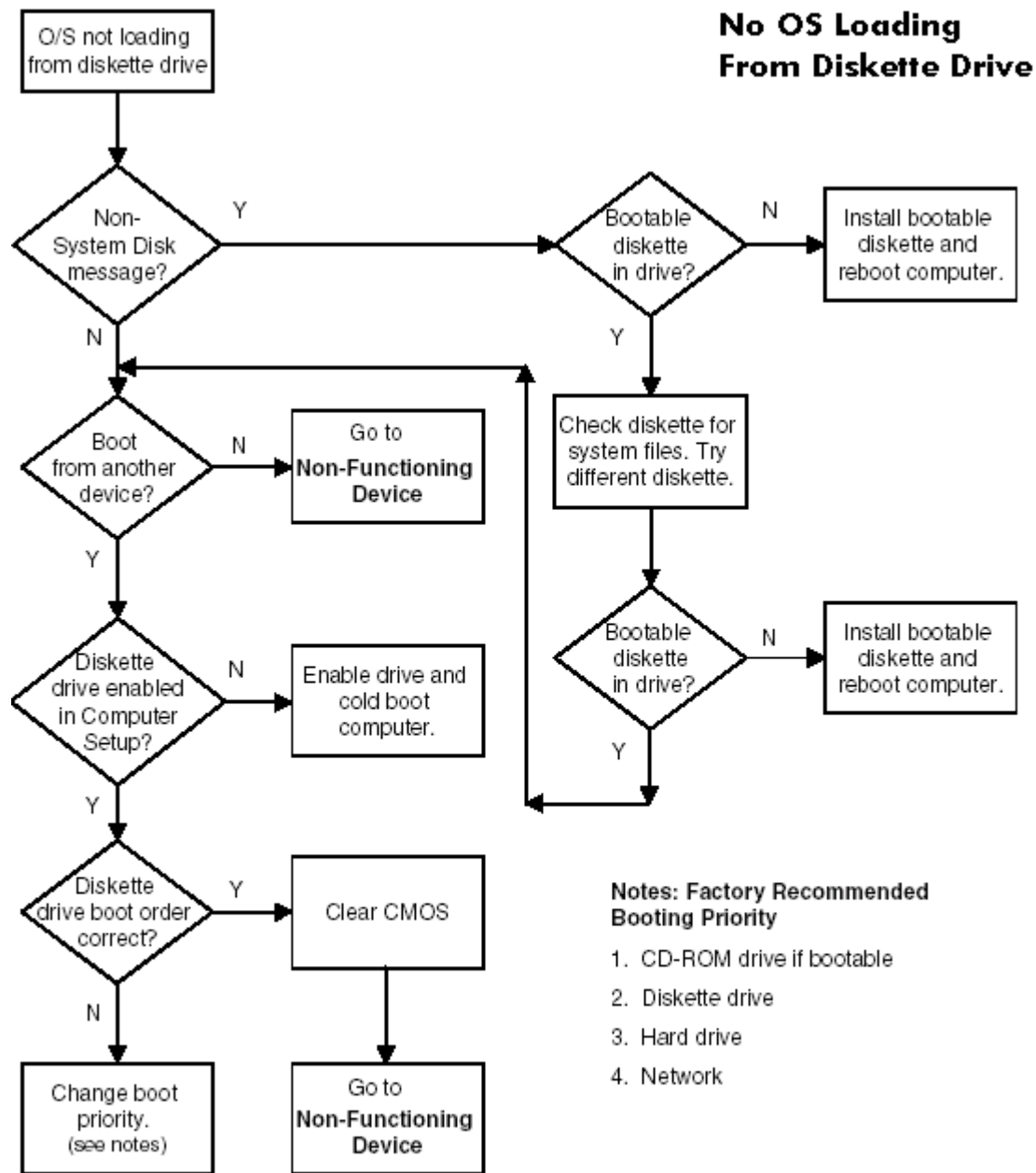
## No OS Loading from Hard Drive, Part 2



## No OS Loading from Hard Drive, Part 3

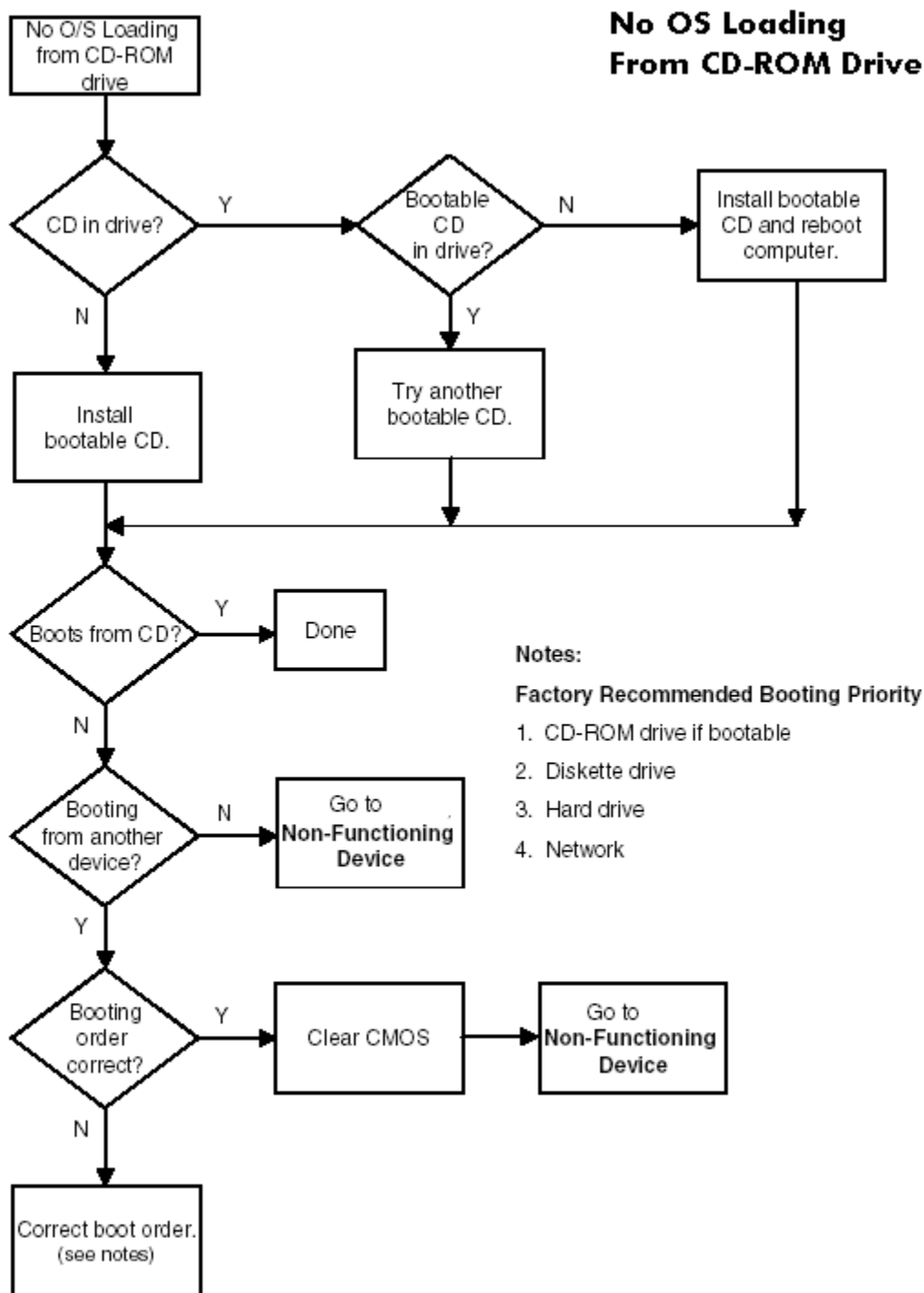


## No OS Loading from Diskette Drive

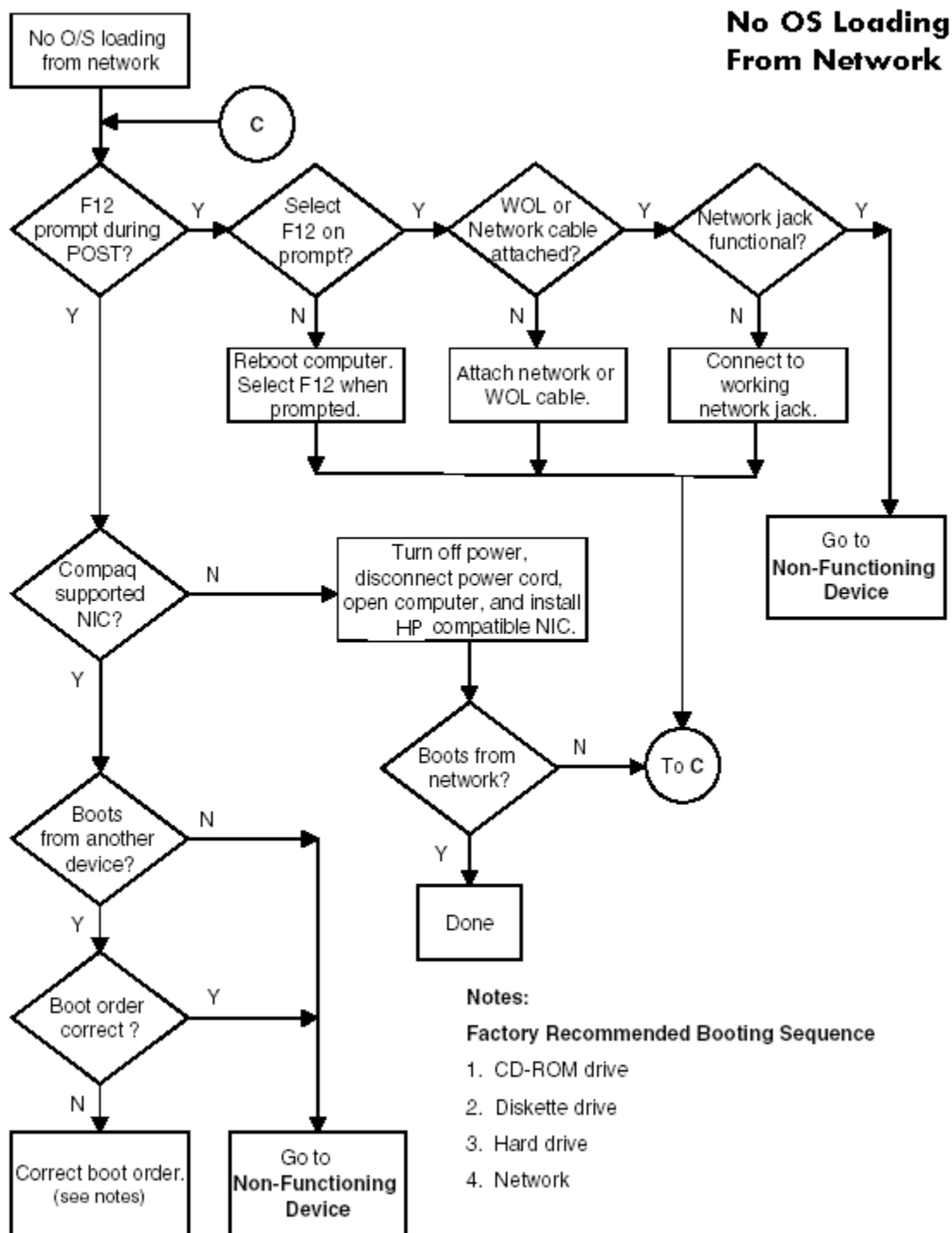




## No OS Loading from CD-ROM Drive



## No OS Loading from Network



# Non-functioning Device

